DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Arnold Schwarzenegger, Governor

Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-005212 Address: 333 Burma Road **Date Inspected:** 12-Jan-2009

City: Oakland, CA 94607

OSM Arrival Time: 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Xu Le Feng / Liu Yang **CWI Present:** Yes No **Inspected CWI report:** Yes **Rod Oven in Use:** Yes No No N/A N/A Yes N/A Weld Procedures Followed: N/A **Electrode to specification:** No Yes No Yes N/A **Qualified Welders:** No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** TOWER COMPONENTS

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Gady Rao, was present during the times noted above for observations relative to the work being performed.

Magnetic Particle Testing:

Bay 10

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) & the weld designations reviewed are as follows:

WSD1 – SA 107 - 9, 10, 12, 13, 16, 14A, 17A, 17B, 20A, 20B WEST TOWER; SKIN-A; LIFT-1; Stiffener to Bottom plate. Completed.

WSD1 – SA 107 F / J – 9,10, 12, 13, 16, 17, 19, 20, 25, 26 WEST TOWER; SKIN-A; LIFT-1; Stiffener to Bottom plate. Completed.

WSD1 – SA 107 –3, 6, 11, 14, 17, 20A, 20B WEST TOWER; SKIN-A; LIFT-1; Stiffener to Bottom plate. Completed.

WSD1 – SA 107 D / J – 8, 9, 12, 13, 16, 17, 19, 20, 25, 26 WEST TOWER; SKIN-A; LIFT-1; Stiffener to

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Bottom plate. Completed.

WSD1 – SA 107 E / J –9,10, 12, 13,15, 16, 18, 19, 25, 26 WEST TOWER; SKIN-A; LIFT-1; Stiffener to Bottom plate. Completed.

 $WSD1 - SA\ 653\ A\ /\ F\ -24,\ 25,\ 26,\ 27A,\ 27B\ WEST\ TOWER;\ SKIN-A;\ LIFT-1;\ Stiffener\ to\ Bottom\ plate.$ Completed.

 $WSD1 - SA\ 107\ D\ /\ J - 3$, 6, 11, 14, 17, 22A, 22B WEST TOWER; SKIN-A; LIFT-1; Stiffener to Bottom plate. Completed.

 $WSD1 - SA\ 107\ F/J-3$, 6, 11, 15, 18, 22A, 22B WEST TOWER; SKIN-A; LIFT-1; Stiffener to Bottom plate. Completed.

WSD1 – SA 107 E / J – 6, 11, 14, 17, 20A, 20B WEST TOWER; SKIN-A; LIFT-1; Stiffener to Bottom plate. Completed.

Bay 10

FCAW

- 1) FCAW welding of weld joint NSD1-SA 76 F / H 27, 31, 36, 37, 40, 42, 43,48, 54, 55, 58 located on SKIN-E; LIFT-1; Welder is identified as 040338 / 052075 / 054069 / 057180 / 203477 / 201825. ZPMC QC is identified as Chen Shou Hua. The welding variables recorded by QC appeared to comply with the B-T-2332-TC-U5-F.
- 2) FCAW welding of weld joint NSD1-SA 108 1B, 3B located on PCMK P753 to SA 108 & P709 to SA 108. Welder is identified as 040345, 053474. ZPMC QC is identified as Wan wen Zhong. The welding variables recorded by QC appeared to comply with the B-T-2321-B-P5-F.

BAY 11

SAW - NON - FCM

SAW welding of weld joint WSD1-SA 298 A / G – 2A located on; SKIN-E; LIFT-2. Welder is identified as 040634. ZPMC QC is identified as Li Hong Fei / Xu Li Feng. The welding variables recorded by QC appeared to comply with the B-T -2221-B-U3C-S- 2.

FCAW

- 1) 2) FCAW welding of weld joint WSD1-SA 340 D / F 26, 27; SA 340 E / F 27, 28; located on SKIN-A; LIFT-2; Welder is identified as 066825 / 068918 / 068919 / 067037 / 066328 / 067275. ZPMC QC is identified as Pengguo / Xu Le Feng. The welding variables recorded by QC appeared to comply with the B-T-2332-TC-P5-F.
- 2) FCAW welding of weld joint WSD1-SA 340 E / F 5, 6; SA 340 D / F 5, 6; SA 340 D / F 21,22 located

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

on SKIN-A; LIFT-2; Welder is identified as 066825 / 068918 / 068919 / 067037 / 066328 / 067275. ZPMC QC is identified as Xiao Yun / Xu Le Feng. The welding variables recorded by QC appeared to comply with the B-T-2332-TC-P5-F.

SMAW

Strut Connection Plate Angle: FCM – Materials:

SMAW welding of weld joint ED1-SA 250 - 43M - 1 – 1B, WD1 - SA 250 - 38M - 1 – 1B, located on; PCMK P49 to SA250; Welder is identified as 058009 / 046704. ZPMC QC is identified as Zhu Zhang Hai. The welding variables recorded by QC appeared to comply with the B - T - 3211 - TC - U5B - 1.

SMAW (Repair)

Repair of weld located on WSD1 – SA 355 – 2A/2B; WSD1 – SA 176 – 1A/1B, piece mark – SA355 & SA176; Welder is identified as 049099 / 040733. ZPMC QC is identified as Li Hong Fei / Xu Li Feng. The welding variables recorded by QC appeared to comply with WPS - 345 - SMAW - 2G (2F) - Repair

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod 134-8257-0045, who represents the Office of Structural Materials for your project.

Inspected By:	Rao,Gady	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer